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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/588,261	06/06/2000	Schuster Karl-Heinz	79456	9462

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EXAMINER

INZIRILLO, GIOACCHINO

ART UNIT PAPER NUMBER

2828

DATE MAILED: 05/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/588,261

Applicant(s)

KARL-HEINZ ET AL. *ch*

Examiner

Gioacchino Inzirillo

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

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Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4. 6) ☐ Other: .

DETAILED ACTION***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 7 and 11 rejected under 35 U.S.C. 102(b) as being anticipated by Horton US 5,309,456 (herein after known as Horton). Horton discloses a device for reducing the peak power of a pulsed laser light source, see column 1 lines 59 – 63. In Fig. 4 he illustrates his invention. Therein is at least one beam splitter 21, and a partial beam is made via reflecting components. Horton discloses at least three reflecting components indicated by reference numerals 24, and mirrors 16a – 16d. Please note that 16b – 16d are not labeled but are similarly situated as 16a is to delay path 18a, with respect to their respective delay paths 18b – 18d. One can tell from Fig. 4 that the mirror 24 is arranged at an angle to the beam path. Further consideration of Fig. 4 shows that there are two detour lines formed. The initial beam from laser 27 is split by splitter 21. One portion is reflected towards mirror 24 and the other portion is transmitted. The transmitted and reflected portions will have further transmitted and reflected portions. However, the two detour lines are defined as follows; the first detour line is between the splitter 21 and the mirror 16a – 16d and the second is between the mirror 24 and the mirrors 16a – 16d. As can be seen in the figure, the running of the detour lines is repeatedly run. Finally, the beams are combined after running the detour lines by the combiner 34 to form one output beam 37.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 5, 6 and 8 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horton.

Regarding claims 2, 5 and 9, Horton discloses the claimed invention except for the values of a path difference of 0.5 m, and angle of between 30 and 50 degrees and a detour lines with lengths of over 2m and over 10m. It would have been obvious to one of ordinary skill in the art at the time the invention was made to do so, since it is held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCP 1980).

Art Unit: 2828

1 Regarding claim 6, it would be obvious to one of ordinary skill in the art to use the Brewster
2 angle to eliminate spurious reflections.

3
4 Regarding claim 8, the detour lines can only be arranged in series or parallel, and either can be
5 used with similar outcomes. Therefore, lacking any degree of criticality, forming in series the
6 detour lines would be obvious.

7
8 Regarding claim 10, the Keplerian telescope of claim 10 amounts to two lenses. The use of
9 lenses would be obvious to one of ordinary skill in the laser art.

10
11 Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horton as
12 applied to claims 1 – 10 above, and further in view of GB 1,098,897. Horton fails to teach a
13 phase retarding plate. However, GB 1,098,897 teaches such a device. Therefore, it would be
14 obvious to one of ordinary skill in the art to modify Horton as taught by GB 1,098,897.

15
16 ***Prior Art***

17
18 The following US patents are being made of record, even though they were not relied upon in
19 this Office Action, for being similar in subject matter, and may be relied upon in any future
20 Office Actions: 4918751, 5349591, 5315604, 5233460, 5337333, 5329398, 5661748.

Art Unit: 2828


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gioacchino Inzirillo whose telephone number is 703-305-1967.

The examiner can normally be reached on M-F 8:30AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on 703-308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Gioacchino Inzirillo
Examiner
Art Unit 2828
April 26, 2002


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